

Notice of Allowability

Application No.

10/552,255

Examiner

Ismael Negron

Applicant(s)

NAKATA ET AL.

Art Unit

2885

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed October 19, 2007.
2. ☒ The allowed claim(s) is/are 1, 8, 15 and 17-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on October 19, 2007 has been entered. Claims 1, 8 and 15 have been amended. Claims 2-7, 9-14 and 16 have been cancelled. Claims 17-24 have been added. Claims 1, 8, 15 and 17-24 are still pending in this application, with claims 1, 18 and 21 being independent.

Allowable Subject Matter

2. Claims 1, 8, 15 and 17-24 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Applicant teaches a first embodiment including an illumination device including a plurality of spherical photoelectric conversion elements, a lens member for guiding of concentrating light to the conversion elements, a condenser for accumulating power from the conversion elements, a plurality of light sources powered by the conversion elements, a light sensor for controlling illumination of the light sources, and a sealing member integrating the illumination device into a single unit. A control circuit is also included for energizing either of the plurality of light sources based on the amplified output of the light sensor.

A second embodiment includes a plurality of spherical photoelectric conversion elements, a semi-spherical lens member, a partial-spherical metallic reflection members disposed below the conversion elements, a luminous device, and a synthetic resin

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member encapsulating the converting elements, the luminous device and the reflection members. The converting elements include a spherical crystal of p-type or n-type semiconductor material, a pn junction formed by a diffusion layer adjacent the surface of the crystal, a spherical light receiving surface, and first and second electrodes disposed diametrically opposite one another on bottom and top sides of the crystal. The converting elements are connected in series with the last converting element being connected to the reflection member.

4. No prior art was found teaching individually, or suggesting in combination, all of the features of the applicants' invention, specifically a control circuit for energizing either of a plurality of light sources based on the amplified output of a light sensor, or the specific arrangement of the converting elements, in combination with the recited structural limitations of the claimed illumination device.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-

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2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee, can be reached on (571) 272-7044. The facsimile machine number for the Art Group is (571) 273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

/Ismael Negrón/
Patent Examiner
AU 2885